

Amendments to the Claims:In the claims:

Please CANCEL claims 1-15 and 23-28 without prejudice, and ADD new claims 29-40 such that the pending claims will read as follows:

Claims 1-20 (Canceled).

Claim 21 (Previously presented): A vacuum processing system, comprising:

a transfer chamber;  
a lid mounted on the transfer chamber wherein the lid has a curved configuration such that an edge of the lid is sealed to an edge of the transfer chamber and the lid is curved such that a center of the lid gradually increases its distance both horizontally and vertically from the edge of the transfer chamber; and

a transparent window element positioned between the edge of the lid and the edge of the transfer chamber.

Claim 22 (Previously presented): The vacuum processing system of claim 21 wherein the transfer chamber is circular.

Claims 23-28 (Canceled).

Claim 29 (New): The vacuum processing system of claim 21, wherein the transfer chamber is adapted to couple to and be selectively sealed from at least one processing chamber and at least one load lock chamber and to house at least an end effector of a robot adapted to transport a substrate

between the at least one processing chamber and the at least one load lock chamber.

Claim 30 (New): The vacuum processing system of claim 21, wherein the lid has a convex configuration such that the lid center is vertically closer to an inside area of the transfer chamber as compared to an edge of the lid.

Claim 31 (New): The vacuum processing system of claim 21, wherein the lid has a concave configuration such that the lid center is vertically further from an inside area of the transfer chamber as compared to an edge of the lid.

Claim 32 (New): The vacuum processing system of claim 21, wherein the lid comprises a plurality of windows positioned within the curved configuration of the lid.

Claim 33 (New): The vacuum processing system of claim 21, wherein the lid is comprised of a metal selected from the group consisting of copper, aluminum, and steel.

Claim 34 (New): The vacuum processing system of claim 21, wherein the lid is comprised of stainless steel.

Claim 35 (New): The vacuum processing system of claim 34, wherein the lid is constructed by spinning.

Claim 36 (New): The vacuum processing system of claim 35, wherein the lid is electro-polished following spinning.

Claim 37 (New): The vacuum processing system of claim 21, wherein the lid further comprises a structural feature for absorbing stress to the lid.

Claim 38 (New): The vacuum processing system of claim 37, wherein the structural feature is an "S" transition.

Claim 39 (New): The vacuum processing system of claim 21, wherein the lid further comprises one or more diagnostic devices.

Claim 40 (New): The vacuum processing system of claim 21, wherein the lid further comprises one or more processing devices.